

Testimony of Gary Milhollin

Professor Emeritus, University of Wisconsin Law School
and
Director, Wisconsin Project on Nuclear Arms Control

Before the Subcommittee on Near Eastern and South Asian Affairs
Committee on Foreign Relations
United States Senate
March 22, 2000

I am pleased to appear before this distinguished subcommittee to discuss the situation in Iraq. I direct the Wisconsin Project on Nuclear Arms Control, a research project here in Washington that is devoted to tracking and slowing the spread of nuclear weapons.

I will begin by describing a recent Iraqi procurement attempt, and then try to assess the inspection system created under U.N. Resolution 1284. I will also try to provide an overview of the threat posed by Iraq to international security.

I would like to submit three items for the record. The first is an article I recently published in the *New Yorker* detailing Iraq's use of the oil-for-food program to buy components that can trigger nuclear weapons. The second is a table my organization prepared after the inspectors left Iraq in 1998, which lists what remains unaccounted for in Iraq's mass destruction weapon programs. The third is a chart on Saddam Hussein's procurement network that my organization prepared a few years ago but which is still relevant to the issues we face today.

What Has Saddam Hussein been doing recently?

More than one year has passed since U.N. inspectors left Iraq, and the world is wondering what Saddam Hussein is up to. The short answer is: he has been shopping for A-bomb components in Europe. Iraq is allowed to import medical equipment as an exception to the U.N. embargo, so in 1998 Iraq ordered a half-dozen "lithotripter" machines, ostensibly to rid its citizens of kidney stones, which the lithotripter pulverizes inside the body without surgery.

But each machine requires a high-precision electronic switch that has a second use: it triggers atomic bombs. Iraq wanted to buy 120 extra switches as "spare parts." Iraq placed the order with the Siemens company in Germany, which supplied the machines but forwarded the switches order to its supplier, Thomson-C.S.F., a French military-electronics company. The French government promptly barred the sale. Stephen Cooney, a Siemens spokesman, claims that Siemens provided only eight switches, one in each machine and two spares. Sources at the United Nations and in the U.S. government believe that the number supplied is higher.

The lesson from this episode is that Iraq is still trying to import what it needs to fuel its nuclear weapon program.

And Iraq is closer to getting the bomb than most people think. The U.N. inspectors have learned that Iraq's first bomb design, which weighed a ton and was a full meter in diameter, has been replaced by a smaller, more efficient model. From discussions with the Iraqis, the inspectors deduced that the new design weighs only about 600 kilograms and measures only 600

to 650 millimeters in diameter. That makes it small enough to fit on a 680 millimeter Scud-type missile. The inspectors believe that Iraq may still have nine Scuds hidden somewhere.

The inspectors have also determined that Iraq's bomb design will work. Iraq has mastered the key technique of creating an implosive shock wave, which squeezes a bomb's nuclear material enough to trigger a chain reaction. The inspectors have learned that the new Iraqi design also uses a "flying tamper," a refinement that "hammers" the nuclear material to squeeze it even harder, so bombs can be made smaller without diminishing their explosive force.

How did Iraq progress so far so quickly? The inspectors found an Iraqi document describing an offer of design help from an agent of Pakistan. Iraq says it didn't accept the offer, but the inspectors think it did. Pakistan's latest design also uses a flying tamper. Regardless of how the Iraqis managed to do it, Saddam Hussein now possesses an efficient nuclear bomb design. The only thing he lacks is enough weapon-grade uranium to fuel it – about sixteen kilograms per warhead.

Resolution 1284 and the new inspection system

The lithotripter episode exposes one of the key weaknesses of the U.N. oil-for-food program. While its humanitarian objectives are laudable, the truth is that oil-for-food is really "oil-for-arms" as viewed from the Iraqi side. Iraq has been allowed to purchase humanitarian items such as medical equipment with money earned from oil exports so long as the funds were administered by the U.N. sanctions committee. But Iraq was able to disguise its purchase of the nuclear weapon triggers as medical equipment and the sanctions committee approved the export. The sale was restricted only by the national export controls applied by the supplier countries.

Under U.N. Resolution 1284, the sanctions committee loophole will now be expanded. The resolution lifts the ceiling on Iraqi oil exports, and it authorizes the committee to draw up lists of items including food, medical equipment, medical supplies, and agricultural equipment that will not have to go through the sanctions committee for approval. In January, the U.N. Secretary General was able to report that these lists had already been drawn up. In addition, the resolution sets up a group of experts charged with speedily approving contracts for parts and equipment necessary to enable Iraq to increase its oil exports.

The result of the liberalization is this: Iraqi oil revenues will rise, large quantities of goods will be imported without U.N. approval, and the sheer volume will overwhelm the tracking system that is currently in place, even if monitors do return to Iraq. Iraq is now slated to receive \$3.5 billion in authorized imports in the current phase of the oil-for-food plan, more than any small committee can keep tabs on.

Our chart in the *New York Times, Week in Review* from 1993 gives a good idea of who Iraq's suppliers were before the Gulf War. Most of these companies still exist, and Iraq still

wants to buy what they produce. The pie chart illustrates the scope of the problem. U.N. inspectors never managed to fully expose or eradicate this procurement network, despite valiant efforts. There is every reason to think that this network is swinging back into action in the absence of inspections.

Resolution 1284 also promises in paragraph 33 the early lifting of sanctions if Iraq cooperates with U.N. inspectors for 120 days on the monitoring and disarmament tasks specified in the inspectors' work programs. Gone is the requirement for full disarmament. Instead there is the "checklist" approach that Iraq has been urging for years. The U.N. inspectors must provide Iraq with a list of things to do, and Iraq need only show some progress toward doing them in order to suspend the existing embargo. Iraq will not have to answer all the remaining questions about its weapon programs; it will only have to show that it "has cooperated in all respects" with the work program. What it means to "cooperate in all respects" is not defined by the resolution. It is clear, however, that "cooperation" does not mean "achieving disarmament."

Another weakness of the new resolution is its silence on who the new inspectors will be. The resolution never addressed the question whether former UNSCOM inspectors would serve in the new inspection body, called the U.N. Monitoring, Verification and Inspection Commission (UNMOVIC). In January, Dr. Hans Blix was chosen to head UNMOVIC. After assuming his post earlier this month, Dr. Blix said that he would demand "unrestricted access" to Iraqi sites but would not "humiliate" Iraqi leaders with a procession of surprise inspections. He made it clear that the new agency would seek a more cordial relationship with Iraq. Dr. Blix also noted that he would rely on former UNSCOM inspectors in a transition period, but made no promise to give them permanent posts. Lastly, he said that the new inspectors would have to be full-time employees of the United Nations, rather than come on loan from their governments.

The United States should keep the pressure on Mr. Blix to retain the former UNSCOM inspectors on staff. These dedicated men and women not only undertook personal risk to carry out a hazardous duty, but in the process they developed a body of knowledge and experience that will be lacking in a new group of inspectors. Losing the UNSCOM inspectors will mean losing their invaluable familiarity with Iraq's weapon programs. The former inspectors should not be thrown over the side just to please Saddam Hussein.

Dr. Blix has a checkered history in Iraq. While Dr. Blix was head of the International Atomic Energy Agency, Iraq ran an ambitious nuclear weapon program under his inspectors' very noses. This activity included a breach of the international safeguards obligations that his agency was supposed to be enforcing. And after the Gulf War, Iraq was nearly given a clean nuclear bill of health by his timid inspectors in 1991. The IAEA and Dr. Blix were saved from humiliation only by an Iraqi defector, who provided the lead that caused the discovery of Iraq's giant uranium enrichment program. The record shows that Dr. Blix's agency made repeated errors in Iraq, and meekly relied on Iraqi disclosures when more assertiveness was clearly called for. Unless Dr. Blix is more effective at UNMOVIC than he was at the IAEA, the inspectors – whoever they will be – are unlikely to find anything in Iraq.

Threat and Response

Present U.S. efforts won't stop the Iraqi bomb. American jets are patrolling Iraq's no-fly zones and blowing up its air defenses, but these pinpricks won't hinder bomb-making at secret sites. The Iraqis have learned the art of camouflage very well. The United States and Britain are also trying to maintain the international trade embargo, but it is eroding because key countries don't support it and there are no inspectors to check on what comes into Iraqi ports. The United States has threatened to overthrow Saddam, but this threat is viewed as empty in the absence of a credible means to carry it out.

In effect, the world is reverting to the position it was in before the Gulf War. With no inspectors inside Iraq, Western intelligence agencies must try to sniff out Saddam Hussein's purchases from abroad, and to divine what his hidden arms factories are making with them. That method failed in the 1980's. Western intelligence never discovered the key component of Iraq's nuclear manufacturing effort: a string of giant magnets that would have turned out critical masses of bomb fuel by 1995 if Saddam had not invaded Kuwait.

The world can ill afford another such debacle. An Iraqi bomb, or even the imminent threat of one, removes any hope of coaxing Iran off the nuclear weapon path. With Saddam building bombs next door, Iran can only speed up its drive for weapons of mass destruction. And once Iraq and Iran are able to target Israel with nuclear warheads, how can Israel feel secure enough to make the concessions necessary for peace in the Middle East?

The best chance of containing Saddam is still the same: to disarm him. And the best way to do that is to unite the U.N. Security Council behind meaningful inspections. But international cooperation in dealing with Iraq has practically ceased, despite the negotiation of Resolution 1284.

The cost of paralysis could be high. It is only a matter of time until Iraq's bomb factories start producing again, if they haven't already. The U.N. inspectors believe that Iraq is withholding drawings showing the latest stage of its nuclear weapon design, blueprints of individual nuclear weapon components, and drawings showing how to mate Iraq's nuclear warhead with a missile. Iraq claims that these things either do not exist or are no longer in its possession. In addition, Iraq has failed to turn over documents revealing how far it got in developing centrifuges to process uranium to weapon-grade, and has failed to provide 170 technical reports it received showing how to produce and operate the centrifuges. Iraq claims that all these documents were secretly destroyed. Nor has Iraq accounted for materials and equipment belonging to its most advanced nuclear weapon design team.

And the nuclear threat is not the only worry. Iraq is also hiding key parts of its chemical weapon program. Iraq has refused to account for at least 3.9 tons of VX, the deadliest form of

nerve gas, and at least 600 tons of ingredients to make it. Iraq produced the gas but claims it was of low quality and that all of the ingredients to make it were either destroyed or consumed during production attempts. Also missing are up to 3,000 tons of other poison gas agents that Iraq admitted producing but said were used, destroyed or thrown away, and several hundred additional tons of agents the Iraqis could have produced with the 4,000 tons of missing ingredients they admit they had at their disposal. Iraq also admits producing or possessing 500 bombs with parachutes to deliver gas or germ payloads, roughly 550 artillery shells filled with mustard gas, 107,500 casings prepared for various chemical munitions, and 31,658 filled and empty chemical munitions – all of which Iraq claims to have destroyed or lost, a fact which inspectors have been unable to verify. Many key records are also missing. These include an Iraqi Air Force document showing how much poison gas was used against Iran, and thus how much Iraq had left after the Iran-Iraq war, as well as “cookbooks” showing how Iraq operated its poison gas plants.

The uncertainties surrounding Iraq’s biological weapon program are greatest of all. The total amount of germ agent Iraq produced (anthrax, botulinum, gas gangrene, aflatoxin) has never been revealed to the inspectors, who know only that Iraq’s production capacity far exceeded what it admitted producing. Iraq has simply alleged that its production facilities were not run at full capacity, a claim directly contradicted by its all-out drive to mass-produce germ warfare agents. Inspectors believe that Iraq retains at least 157 aerial bombs and 25 missile warheads filled with germ agents, retains spraying equipment to deliver germ agents by helicopter, and possessed enough growth media to generate three or four times the amount of anthrax it admits producing. Iraq either claims that these items were destroyed unilaterally, claims they were used for civilian purposes or simply refuses to explain what happened to them. Nor can inspectors account for the results of a known project to deliver germ agents by drop tanks or account for much of the equipment Iraq used to produce germ agents. Finally, Iraq contends that many essential records of its biological weapon program, such as log books of materials purchased, lists of imported ingredients, and lists of stored ingredients, simply “cannot be found.”

Iraq also retains some of its delivery capability. Up to nine ballistic missiles, plus imported guidance components, remain unaccounted for. Iraq claims they were all secretly destroyed, but their remains were not found in the sites where Iraq claimed it dumped them. In addition, the inspectors cannot account for up to 150 tons of missile production materials, or for Iraq’s stockpile of liquid rocket fuel. Because Iraq has been allowed to produce short-range missiles (less than 150 kilometers in range) under U.N. monitoring, it has manufacturing capability that it can convert to longer-range missiles now that monitoring has ceased.

Saddam Hussein has not been idle since December 1998. U.S. officials have been cited in the media as saying satellite photographs and U.S. intelligence reports have shown that Iraq has in the last year rebuilt many of the 100 military and industrial sites damaged or destroyed by American and British air strikes in December 1998. Of those targets, 12 were reportedly missile factories or industrial sites involved in Iraq’s weapons of mass destruction programs, at which officials said significant reconstruction had been seen – including the Al Taji missile complex.

For the moment, our government seems content to live with inaction. The present U.S. policy is to isolate Saddam diplomatically, maintain the existing trade sanctions, and give at least some help to Iraqi opposition forces – a strategy known as “containment plus.”

Unless U.S. foreign policy makers once again place a high priority on disarming Iraq and lead the international community in that direction, Saddam Hussein will achieve his mass destruction weapon aspirations in the relatively short-term. Despite a seven-year international effort to rid Iraq of these weapons, Iraq today retains a great potential for producing them. Experts have estimated that Iraq could resume manufacture of chemical and biological agents within months of a decision to do so. Similarly, Iraq could probably assemble a nuclear weapon within weeks of importing the fissile material necessary to fuel it. Five years is a reasonable estimate if Iraq itself is obliged to produce the fissile material. By refusing to cooperate with U.N. inspectors, and by foregoing billions of dollars in oil revenue rather than choosing to disarm, Iraq has shown that building mass destruction weapons remains one of its primary goals. Therefore, the United States should revisit its own Iraq policy before it is too late.